

**REMARKS**

The Office Action mailed on July 10, 2003 has been reviewed and the comments of the Patent and Trademark Office have been considered. Prior to this paper, claims 1-5 and 8 were pending in the present application. By this paper, Applicants do not cancel or add any claims. Therefore, claims 1-5 and 8 are now pending in the present application.

Applicants respectfully submit that the present application is in condition for allowance for the reasons that follow.

**Power of Attorney**

Applicants provide a copy of a signed Power of Attorney form attached in Appendix A to permit the law firm of Foley and Lardner to prosecute the present application.

Applicants request that Examiner Fiorilla contact Applicants' representatives at (202) 295-4747 if an examiner's amendment is needed to place the case into allowance.

However, Applicants request that all other future correspondence concerning this application be sent to:

Romain L. Billiet and Hanh Thi Nguyen  
135A Malacca Street  
10400 Penang, Malaysia

**Interview of August 27, 2003**

Examiner Fiorilla is thanked for extending the courtesy of an interview to Applicants' representatives on August 27, 2003, where it was agreed that the term "predetermined" did not raise an issue under 35 U.S.C. §112, second paragraph, warranting a rejection of the claims, and that the rejection under 35 U.S.C. §112, second paragraph could be successfully traversed with argumentation.

**Amendments to Claims 1 and 3**

As seen above, Applicants have amended claim 1 and claim 3 to address a possible antecedent basis issue and to address a possible future enablement rejection. Support for this amendment can be found at paragraph 0066 of patent application publication US 2002/0190441. Applicants respectfully submit that the amendments do not require a new art search to be performed.

**Rejections Under 35 U.S.C. §112, Second Paragraph**

In the Office Action, claims 1-5 and 8 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Applicants respectfully traverse this rejection.

There are currently over half-a-million patents containing the word "predetermined" in the claims. The case cited as supporting the rejection is *50 years old*, and has *not been cited*, to the best of Applicants' representative's knowledge, even a single time, by another court. Still further, the cited case is from the District of Columbia Court of Appeals, a court not known for its authority in patent matters.

Additionally, the MPEP currently cites cases containing claims that contain the phrase "predetermined." (See for example, MPEP §2144.04(III).) Thus, by implication, the Patent Office does not view this term as an indefinite term.

Applicants respectfully submit that one of ordinary skill in the art would readily understand what is encompassed by the use of "predetermined" in the claims. Reconsideration is respectfully requested.

**Rejections Under 35 U.S.C. §112, First Paragraph**

In the Office Action, claims 1-5 and 8 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement based on the addition of the term "substantially" in the claims.

In order to advance prosecution, Applicants have amended the claims as seen above to again utilize the pre-amended language of the claims in regard to the phrase "substantially

all.” Applicants respectfully submit that the claims are now in condition for allowance, since, as was agreed in the interview of August 27, 2003, the replacement of the phrase “substantially all” with “any” removes the 35 U.S.C. §112, first paragraph rejection. Reconsideration is respectfully requested.

**Possible Future Rejection of Claim 3 Under 35 U.S.C. § 112, First Paragraph**

During the interview of August 27, 2003, Examiner Fiorilla indicated that he might reject claim 3 under 35 U.S.C. § 112, first paragraph.

Applicants respectfully submit that claim 3 claims subject matter which was sufficiently described in the specification. Referring to the published application (US 2002/0190441), Applicants cite paragraph 0097, which states in part that:

The thermoplastic matrix or binder is made up of at least one thermoplastic organic material though generally it will be made up of several different organic constituents which may include polyolefin resins, silicones, waxes, oils, greases and the like. In most cases various organic plasticizers and antioxidants will also be included to optimize the characteristics of the thermoplastic matrix and to avoid or retard its premature oxidative degradation.

Applicants respectfully submit that claim 3 is indeed described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention.

**CONCLUSION**

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to

Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Examiner Fiorilla is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date Oct 10, 2003

By 

FOLEY & LARDNER  
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22428

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This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for producing a body from nanoparticulate material, comprising the steps of:
  - a. providing at least one type of sinterable precursor nanoparticulate material,
  - b. attriting a predetermined volume of said precursor nanoparticulate material or materials under a protective non-reactive fluid blanket having substantially higher density than that of water, and breaking up any ~~substantially all~~ aggregates and mechanically removing any ~~substantially all~~ adsorbed volatiles, moisture, atmospheric gases or contaminants from the surface of said nanoparticulates or from the fresh surfaces generated during attrition,
  - c. separating any ~~substantially all~~ contaminants thus removed from the deaggregated nanoparticulates,
  - d. removing the protective fluid blanket from the decontaminated nanoparticulates using vacuum distillation,
  - e. desorbing the surface of the nanoparticulates by applying a sufficiently high vacuum,
  - f. allowing a predetermined volume of a suitable surfactant to adsorb onto the surface of the said desorbed nanoparticulates such that at most 50% of the nanoparticulates' surface will be coated with a monolayer of said surfactant.

- g. dispersing said surfactant-coated nanoparticulates in a predetermined volume of a suitable degradable **organic** thermoplastic binder to form a homogeneous thermoplastic compound
  - h. shaping said thermoplastic compound into a green body,
  - i. extracting substantially all of the organic thermoplastic **material binder** from said green body and sintering the thus obtained organic-free preform.
- 2. (Previously Presented) The method of Claim 1 wherein the said nanoparticulate materials are selected from the class of metals and their alloys, ceramics and their alloys and mixtures of metals and ceramics and their alloys.
  - 3. (Currently Amended) The method of Claim 1 wherein the said degradable **organic** thermoplastic binder ingredients are selected from the class of polyolefins, waxes, plasticizers, greases, oils, surfactants and mixtures of these.
  - 4. (Previously Presented) The method of Claim 1 wherein the formation of aggregates is reduced or prevented.
  - 5. (Previously Presented) The method of Claim 1 wherein the pyrophoricity of nanoparticulates is controlled.
  - 6. (Cancelled)
  - 7. (Cancelled)

8. (Previously Presented) The method of Claim 2, wherein said nanoparticulate materials are selected from the group consisting of metal oxides, carbides, borides, nitrides, silicides, aluminas, mullite, and zeolites.